

***EFFECT OF ZPT IBA (Indole Butyric Acid) CONCENTRATION AND INITIAL MEDIA  
ON EARLY GROWTH OF CACAO  
(Theobroma cacao L.) CROP PLANT***

Syahviardi Alvirza Rahman  
Plantation Crop Cultivation Study Program  
Department of Agricultural Production

***ABSTRACT***

This study aims to determine the effect of good IBA ZPT concentration for cacao plant cuttings (*Theobroma cacao L.*) and the optimal composition of the planting medium for the growth of cacao cuttings. This research was conducted in the nursery of the Seed Technology Laboratory, State Polytechnic of Jember from August to November 2020. The method used was Factorial Randomized Block Design (RAKF) with the first factor is the composition of the planting media and the second factor is the IBA zpt concentration consisting of 12 treatments and 3 replicates. The comparison factor for planting media consisted of 3 levels, namely Sand + TS (1: 1), Sand + PK (1: 1), TS + PK (1: 1) and 4 levels of IBA concentration (500ppm, 1500ppm, 2500ppm, 3500ppm). Further testing was carried out with the BNJ further test (Honest Real Difference) with a level of 5%. The results showed that the interaction between IBA ZPT and root media had a very significant effect on shoot length parameters. The best concentration was obtained in the Z2M1 treatment (2500ppm IBA and Sand + Topsoil media). The composition of the root media had no significant effect on all observed parameters. The concentration of ZPT IBA (*Indole Butyric Acid*) had no significant effect on all observed parameters.

***Keywords: IBA Growth, Planting media, cuttings***